

Notice of Allowability

Application No.

10/759,711

Examiner

LINH BLACK

Applicant(s)

EATOUGH, DAVID A.

Art Unit

2163

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/15/07.
2. ☒ The allowed claim(s) is/are 1-14.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

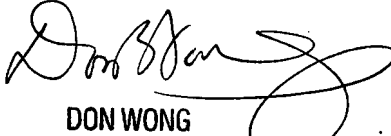
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


DON WONG
SENIOR PATENT EXAMINER
TECHNOLOGY CENTER 2100

Reasons for allowance

1. The following is an examiner's statement of reasons for allowance:

The prior art of record does not teach the combination of limitations in the independent claims 1, 6, and 11, especially, "preparing a multicast domain identification based on the unique identification determined; and providing the multicast domain identification to a central location."

Applicants define "destination" in the specification, paragraphs 42, 47, and 54: "...The destination for the node to use in determining its multicast domain is obtained 902. The destination may be determined by a system administrator and sent out to all nodes on the network. Alternatively, the nodes 106 may be configured to automatically use the administrative system 102 as the destination. In addition, a volunteer process may be used wherein the first node 106 that is started volunteers to be the destination."

The Microsoft computer Dictionary – Fourth Edition defines multicasting as the process of sending a message simultaneously to more than one destination on a network.

In the specification, par. 22, Applicants teach: "The multicast domain identification may comprise a router or similar network device identification and a port identification." In par. 34, "A multicast alias domain consists of all computers that can see each other's multicast traffic without crossing a router.

Also Applicants teach in par. 23 that, "In a further embodiment the central location may include an administrative system that includes a database of multicast domains. [24] In certain embodiments a multicast domain cache may be used. Files

may be reported that are in a multicast domain cache. [40] The multicast domain identification identifies what multicast domain the node belongs to.

As per claims 1, 6, 11, Haggery et al. (US 6331983) teach in

- col. 13, lines 2-45 (a multicast packet does not contain an IP destination host address, but rather contains a destination IP address of a multicast group, equivalent to same destination for nodes in a multicast group).
- col. 6, 1st paragraph (a single router is selected as the designated router for each physical network. Thus, the designated router where the node belongs would be the first router the node encountered and inherently the router would have an identifier in order to be utilized when data is transmitted between devices or sent from a host to a destination.)
- col. 5, lines 10-27 (When a process asks its host to join a new multicast host group, the driver creates a hardware multicast group address, and an IGMP Host Membership Report with the group address is immediately sent. The host network interface is expected to map the group address to local network addresses as required to update its multicast reception filter.)
- col. 6, lines 1-29 (designated router construct a spanning tree that connects all members of an IP multicast group...)
- Haggery et al. also teach: maintaining a database of receiving ports in each switch ...The receiver database would include the multicast group address, ...and the port on which the router is attached for sending or receiving multicast

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traffic - col. 8, lines 45-56. Haggery et al. do not explicitly disclose the limitation "domain identification".

Ueno et al. (2002/0178235) teach multicast packet distribution method...by using a domain address in a packet communication network – paragraph 0002; a packet to be sent to a multicast group in a domain from an origination host...- pars. 0018-0022; fig. 2; domains A, B, C; fig. 9, item s104: with a group address, the connected domain can be identified; a domain can be a subnet – par. 0086. Haggery et al. and Ueno et al. do not explicitly disclose providing the multicast domain identification to a central location.

Boers et al. (2004/0022244) teach source specific multicast group to source mapping – the title; domain name server and a network administrator of system – pars. 0040-0042.

Haggery, Ueno, and Boers et al. do not explicitly teach the combination of limitations in the independent claims.

2. Dependent claims 2-5, 7-10 and 12-14 incorporate the listed limitations by reference and contain limitations that further distinguish over the art of record. For these reasons, claims 2-5, 7-10 and 12-14, are considered allowable over the art of record.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LINH BLACK whose telephone number is 571-272-4106. The examiner can normally be reached on Mon.-Thurs..

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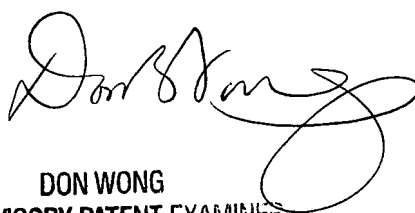
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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June 21, 2007



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